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BEFORE THE
PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
DOCKET NO. 2014-69 -S

IN RE:)
)
Application of Palmetto Wastewater)
Reclamation LLC d/b/a Alpine)
Utilities and d/b/a Woodland Utilities for)
adjustment of rates and)
)
charges for, and the modification of)
certain terms and conditions related to,)
the provision of sewer service.)
_____)

DIRECT TESTIMONY OF
MARION F. SADLER, JR.

Q. WOULD YOU PLEASE STATE YOUR NAME AND PRESENT POSITION?

A. My name is Marion F. Sadler, Jr. I am retired from the South Carolina Department of Health and Environmental Control, or “DHEC,” and provide environmental and utility consulting services in the State of South Carolina as a sole proprietorship that does business as “Sadler Environmental Assistance.”

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I received a Bachelor of Science degree in Mechanical Engineering from Clemson University in 1971. I received a Master of Engineering degree in Environmental Systems Engineering, also from Clemson University, in 1981.

Q. HOW LONG DID YOU WORK AT DHEC?

1 **A.** I worked at DHEC and one of its predecessor agencies for my entire career,
2 which was approximately 34 ½ years.

3 **Q. WOULD YOU PLEASE DESCRIBE YOUR WORK EXPERIENCE?**

4 **A.** Yes. I began working with the South Carolina Board of Health as an
5 Environmental Engineer Associate in July, 1971. In this capacity I was the
6 District Director in the Lower Savannah District Office, which covered
7 Orangeburg, Bamberg, and Calhoun Counties, where I was responsible for the
8 field work of the water supply, domestic wastewater, and swimming pool
9 programs.

10 In 1972, I transferred to the Domestic Wastewater Division in the main
11 Columbia office, where I was a plan reviewer of private wastewater collection and
12 treatment systems throughout South Carolina.

13 In 1973, the South Carolina Pollution Control Authority, or “PCA,” was
14 merged with the Board of Health and the combined agencies were re-formed as
15 DHEC. As a result of that restructuring, I became District Director of the Central
16 Midlands Environmental Quality Control District Office, which covered Richland,
17 Lexington, Newberry, & Fairfield Counties. In this capacity I was responsible for
18 the field work of the water supply, wastewater, and swimming pool programs.

19 In August of 1974, I became Section Manager of the Community Section of
20 the Domestic Wastewater Division, Bureau of Water Pollution Control for DHEC.
21 In this capacity I was responsible for permitting activities of domestic wastewater

1 collection and treatment systems throughout the State of South Carolina, except
2 for those owned by municipalities, counties, the federal government, and
3 industries. In this position I supervised up to five (5) plan reviewers and was
4 responsible for administering and developing the statewide program through
5 regulations, program guidance memorandums, etc. I played a key role in the
6 adoption of these items into SC Regulation 61-67, Standards for Wastewater
7 Facility Construction. Also, I was involved in the development and promulgation
8 of SC Regulation 61-82, Proper Closeout of Wastewater Treatment Facilities. In
9 this capacity, I conducted numerous public hearings and testified in proceedings
10 before courts and administrative bodies. During this time, I also testified in rate
11 relief hearings before the Public Service Commission.

12 In September of 1991, I became Director of the Industrial, Storm Water,
13 and Agricultural Permitting Division, which position I held until my retirement
14 from DHEC in 2005. In that capacity I was responsible for the permitting
15 activities of entities involved in the treatment or discharge of industrial
16 wastewater, which included land appliers, direct dischargers, and pre-treaters of
17 non-domestic wastewater. The Storm Water Program I oversaw involved three
18 separate permitting programs: the Industrial, Construction, and Municipal Separate
19 Storm Sewer Systems (MS4s) program. I was also responsible for permitting
20 activities in the Agricultural program, and the Dams and Reservoirs Permitting
21 program. In this position I supervised up to twenty six (26) staff members in four

(4) sections and was responsible for administering and developing these statewide programs through regulations, program guidance memorandums, etc. I was also responsible for implementation of the Federal National Pollutant Discharge Elimination Systems, or "NPDES," component of these three state programs and I interfaced with the Federal agency charged with administering the NPDES program, the Environmental Protection Agency, or "EPA," in its oversight role. Further, I led and assisted in the development of regulations for these programs. I conducted public hearings, testified in court proceedings, made presentations to various concerned organizations, updated state regulations, and appeared before legislative committees on various issues. I also developed web pages and guidance documents for the program areas under my responsibility.

Q. WOULD YOU PLEASE DESCRIBE THE CONSULTING WORK YOU HAVE BEEN DOING SINCE YOU RETIRED FROM DHEC AND YOUR EXPERIENCE IN MATTERS BEFORE THIS COMMISSION IN THAT CAPACITY?

A. Yes. Subsequent to my retirement I have worked with governmental, industry, and private entities on environmental issues such as wastewater permit applications to DHEC, stream buffer ordinances, and NPDES permit matters. Pertinent to this proceeding, I have been retained to provide consulting services in connection with rate relief applications to this Commission by Palmetto Wastewater Reclamation LLC doing business as Alpine Utilities and Palmetto

1 Utilities, Inc. and testified on behalf of those entities in the hearings on both of
2 those matters.

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
4 **PROCEEDING?**

5 **A.** I was retained by PWR to assist it in the rate case before the Commission
6 involving the company's Alpine and Woodland systems by providing testimony
7 on the "Unit Contributory Loading Guidelines" set out in Appendix "A" of DHEC
8 Regulation 61-67. The purpose of my testimony is to describe these guidelines
9 and how they have been incorporated into PWR's approved rate design for the
10 Alpine system customers and how they are proposed to be incorporated into the
11 rate design for the Woodland system customers.

12 **Q. WOULD YOU PLEASE DISCUSS YOUR PREVIOUS SPECIFIC**
13 **KNOWLEDGE OR EXPERIENCE THAT QUALIFIES YOU TO PROVIDE**
14 **TESTIMONY IN THIS MATTER?**

15 **A.** Yes. My knowledge and experience in this regard is professional in nature.

16 When I was employed in the Community Section of the Domestic
17 Wastewater Division of DHEC, I was involved in the permitting of the Alpine
18 Utilities wastewater treatment system and collection systems. This involvement
19 with the system lasted until I transferred to the Industrial, Agricultural, and Storm
20 Water Permitting Division in 1991.

1 When I worked in the Domestic Wastewater Division, I used the Unit
2 Contributory Loading Guidelines (that later were adopted into DHEC Regulation
3 61-67) for 18 years on a routine basis. Being responsible for the statewide
4 permitting of all private wastewater systems, I personally reviewed and/or
5 supervised the personnel who reviewed all of the wastewater plans that were
6 submitted to DHEC for approval by professional engineers on behalf of Alpine
7 Utilities, Inc., the predecessor to PWR. I was also involved in the upgrade of the
8 old Woodland Hills oxidation pond to an aerated lagoon as a result of then new
9 Environmental Protection Agency effluent requirements for secondary treatment.

10 Finally, as Section Manager of the Community Section from 1974 to 1991,
11 I have testified before this Commission on numerous rate hearings for investor-
12 owned wastewater utilities with respect to the utilities' overall operation and
13 maintenance of their wastewater systems and compliance with their NPDES
14 Permits issued by DHEC.

15 **Q. WOULD YOU PLEASE EXPLAIN HOW THE UNIT**
16 **CONTRIBUTORY GUIDELINES IN APPENDIX "A" TO REGULATION**
17 **61-67 WERE DEVELOPED AND HOW THEY ARE CURRENTLY USED?**

18 **A.** Yes. To understand this, I think it is important to first understand some of
19 the background regarding the original Unit Contributory Loading Guidelines. The
20 staff of the PCA developed the original Unit Contributory Loading Guidelines
21 from a review it performed of wastewater text/reference books commonly used in

1 the wastewater engineering and science field. From this review, the typical
2 hydraulic (flow) loadings and organic (BOD₅) loadings listed in the text books
3 were established by the PCA staff for different types of commercial and industrial
4 establishments, residential projects, schools, etc. These typical textbook loading
5 factors were published in the early 1970s by the PCA as a guidance document for
6 use by consulting engineers and their staff. The staff of the Board of Health,
7 which included me and my staff, also utilized this document in our work since
8 both agencies were required by state law to issue wastewater construction permits
9 for proposed subdivisions with 250 or more lots. After the merger of these two
10 agencies to form DHEC, the guidance document with both the hydraulic and
11 organic loading rates was included in DHEC Regulation 61-67. Since then,
12 DHEC has amended SC Regulation 61-67 by removing the organic loading factor
13 from the Unit Contributory Loadings and creating the flow based loading factors
14 contained in Appendix "A" to the current regulation.

15 **Q. WHAT FLOW RATE OR TYPE OF FLOW DO THE UNIT**
16 **CONTRIBUTORY GUIDELINES REPRESENT?**

17 **A.** The flows given in the Unit Contributory Guidelines represent the
18 maximum design daily flow for residences and the different commercial
19 establishments that are listed in the Guidelines.

20 **Q. HOW DOES DHEC USE THESE GUIDELINES?**

1 **A.** DHEC uses the flows in the Guidelines when permitting wastewater
2 collection, treatment, and disposal systems to ensure these systems are properly
3 sized so that the wastewater generated by the customers of a wastewater treatment
4 system is properly transported and treated prior to final disposal or utilization. So,
5 the Guidelines are used by DHEC to ensure adequate capacity in wastewater
6 utility systems to meet maximum customer needs. Further Regulation 61-67
7 defines “Permitted Flow” as “the value equivalent to the sum of flows as
8 computed for the purpose of issuing construction projects for sewer lines or other
9 connections to the systems.” DHEC keeps track of the total permitted flows for
10 each privately owned wastewater treatment system and will only issue wastewater
11 construction permits for new projects that connect to a wastewater utility’s system
12 if unpermitted capacity is available. Thus, by keeping track of permitted flow for
13 use in permitting of new development projects in a public sewer utility’s service
14 territory, DHEC is able to ensure that a new development project can connect to a
15 particular wastewater treatment system.

16 **Q. HOW HAS THE COMPANY EMPLOYED THESE GUIDELINES**
17 **FOR CUSTOMERS OF ITS ALPINE SYSTEM?**

18 **A.** The rates for the company’s commercial customers served by the Alpine
19 system which have been approved by the Commission use the design flows for
20 residential customers and commercial customers under the Guidelines to establish
21 equivalencies for purposes of distributing the cost of providing service between

1 the residential and commercial customers classifications. These equivalencies
2 are based upon the design capacity for a residence, which is four hundred gallons
3 per day, and the design capacity for the various types of commercial customers,
4 which is expressed in the number of gallons per capacity factors that are peculiar
5 to a given type of commercial customer. The commercial rates for the different
6 type of establishments served by the utility are then determined by multiplying the
7 monthly residential customer service rate, which constitutes one single family
8 equivalent, by the number of equivalencies for each type of commercial
9 establishment, which constitutes a minimum of one single family equivalency. In
10 the Company's last rate relief proceeding dealing with the Alpine system, I
11 testified regarding an extensive commercial customer survey that was undertaken
12 in connection with the proposal to adopt that rate design for PWR Alpine. That
13 survey, which included extensive field work, was undertaken to determine the
14 correct number of equivalency factors for each commercial customer under the
15 guidelines.

16 **Q. HAS THE COMPANY CONDUCTED A COMMERCIAL**
17 **CUSTOMER SURVEY FOR THE ALPINE AND WOODLAND SYSTEMS**
18 **FOR PURPOSES OF THIS RATE CASE WHICH IS AS EXTENSIVE AS**
19 **THAT PERFORMED IN THE PREVIOUS CASE YOU MENTIONED?**

1 **A.** No, it has not. As discussed in the testimony of company witness Rick
2 Melcher, a survey of that magnitude was not needed for this proceeding. A more
3 limited survey was, however, performed as Mr. Melcher discusses.

4 **Q. THE COMPANY’S APPLICATION PROPOSES TO MODIFY THE**
5 **ALPINE RATE DESIGN TO REDUCE THE NUMBER OF GALLONS**
6 **ASSOCIATED WITH CARS SERVED BY ALPINE COMMERCIAL**
7 **CUSTOMERS OPERATING FAST-FOOD RESTAURANT DRIVE- THRU**
8 **FACILITIES FROM FORTY GALLONS TO TEN GALLONS; DO YOU**
9 **THINK THIS IS APPROPRIATE?**

10 **A.** Yes.

11 **Q. WOULD YOU PLEASE EXPLAIN WHY IT IS APPROPRIATE?**

12 **A.** Yes. Because the Company’s rates are subject to Commission approval, I
13 think it is clear that the Commission has the ability to adopt a structure for
14 distributing the cost of service among the different types of customers the
15 Company serves. Further, I am aware that the Office of Regulatory Staff, or
16 “ORS,” issued a report to the Commission in the last PWR Alpine rate docket in
17 which ORS stated its belief that the Company has the right to adjust factors in rate
18 design to address the needs of customers. And, from my involvement in the most
19 recent rate relief proceeding for Palmetto Utilities, Inc., I am aware that all of the
20 parties in that case proposed some modifications to the previously approved rate

1 design for that utility which employs the guidelines to set commercial customer
2 equivalency factors. Therefore, I do not believe it is disputable that modifications
3 to previously approved rate designs can be appropriate.

4 Further, for fast food restaurants with drive-thru facilities, there are many
5 more drive-thru service locations and customers today than there were back in the
6 early 1970s when the guidelines were adopted. Thus, the manner in which these
7 utility customers serve their customers has greatly changed. And, when one
8 considers that the current equivalencies for these types of restaurants treat
9 customers served through drive-thru facilities the same as customers who are
10 using seats in the restaurant, I think it is fair to question whether that equivalency
11 continues to make sense. That question is appropriately answered, I believe, by
12 the analysis done and formula created by Mr. Ed Wallace in the last Palmetto
13 Utilities, Inc. case, which he discusses in his testimony in this case.

14 When I consider all of this information, I conclude that it is appropriate to
15 lower the hydraulic loading factor for drive-thru customers at fast food restaurants
16 as has been proposed by the Company.

17 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

18 A. Yes, it does.